Pharmacogenetics

History Pharmacogenetics was first discovered in the 1950’s, however it was used to isolate how genes affected the metabolizing of drugs. When pharmacogenetics was first started, they did not have the aid of thetechnologywe do today, so the doctors of the 1950’s discovered how genes affected drugs by testing how people of different ethnicities reacted to drugs, and they would record how one ethnicity would react to drug and what side effects they would get compared to another ethnicity, however this was first done because of curiosity or chance.

Once enough data had been collected, it showed that these tests should be done for any other drug made in the drug development process, and has since then progressed through the years due to the progression of technology. Facts First pharmacogenetics trait discovered was the inability to taste the chemical phenylthiourea, and this was due to hereditary reasons. Negative drug reactions are believed to be the reason behind 100, 000 deaths in U. S. hospitals every year. 2. 2 million more suffer from non fatal but still serious reactions to drugs each year.

What is Pharmacogenetics? Pharmacogenetics is the study of how the genes of a person will affect how they react to drugs. This reaction can be positive or negative, the positive affect being the drug working, and the negative affect could be bad reactions or death. These reactions are caused by the way your genes react with the ingredients of the drug. By engaging in the study of pharmacogenetics, we have figured out why men and women react to drugs differently, and why people of different races react to drugs differently.

Using this knowledge doctors have changed the ingredients and structure of the drugs so that they would have the desired affect. With advances in Pharmacogenetics, People would not have to go to the doctors over and over again because they had a negative affect to the drug, because after yourdoctorhad examined your genes, he would be able to identify the perfect drug for you, which would less likely have severe effects. Ethical questions about Pharmacogenetics

One of the biggest problems with pharmacogenetics is that the person must be genetically screened first so that their doctor can analyze their genes and see which drug would be best for the patient. What is wrong with the genetic screening is that if the company the patient was working out found out the person was likely to die young or had a tendency to get sick, the company could end up firing the person to cut costs if the company offershealthinsurance to its workers.

Health insurances Companies could also use the information they found out about this person to deny them coverage or raise the price of their coverage.

Sources www. ncbi. nlm. nih. gov/pmc/articles/PMC2752627/ http://www. actionbioscience. org/genomic/barash. html http://www. prozactruth. com/pharmagenetics. htm http://www. dartmouth. edu/~dmsheart/genetics/pharm/pharm. html http://www. ncbi. nlm. nih. gov/About/primer/pharm. html http://medical-dictionary. thefreedictionary. com/Pharmacogenetics www. ornl. gov/hgmis/medicine/pharma. html www. nigms. nih. gov/pharmacogenetics/